

TITLE OF THE ABSTRACT:

LOCAL RECURRENCE AND FUNCTIONAL OUTCOME OF GIANT CELL TUMOUR OF THE DISTAL RADIUS TREATED WITH ENBLOC RESECTION AND RECONSTRUCTION WITH IPSILATERAL NON VASCULARISED FIBULAR GRAFT

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OBJECTIVES:

1. To determine recurrence rates
2. To assess the functional outcome of hand and forearm
3. To determine the incidence of immediate and delayed complications
4. To measure fibuloulnar distance and to correlate it with functional outcome

METHODS:

It was a prospective study on the patients who underwent surgery using this technique who were followed up. All patients with minimum follow up of 6 months were included. Grip strength and ROM were expressed as percentage of the sound side. Bony and soft tissue recurrences were picked up by radiology and clinical examination. Fibuloulnar distance was measured in post op AP x-rays. After enbloc excision of the tumour, the harvested fibular graft was fixed with narrow DCP along with k wires. Chi square test and Pearson correlation coefficient were used for the corresponding data.

RESULTS:

23 patients were enrolled in the study of which 13 were male and 10 female. Mean age of the patients was 31 years. Recurrence rate was 22%. The average MSTS score was 20.36. The mean fibuloulnar distance was 3.5mm. The most common complication was carpal subluxation (30%) followed by wound infection (17%) and fibulocarpal arthritis (17%). There was an association between age and recurrence as well as between MSTS and grade of tumour. There was a negative correlation between MSTS and fibuloulnar distance. Overall the complication and recurrence rates as well as functional outcome were comparable with previous studies, making this method a good option for distal radius GCTs for developing countries.

Keywords : distal radius GCT, non vascularised fibular graft, recurrence, fibuloulnar distance, MSTS, grip strength, carpal subluxation